is based. The principles are clearly and concisely stated, the author's aim being to develop the reasoning power of the student, and not merely to give him disconnected facts.

The junior student who has no teacher will probably find many difficulties in the book. The two-wattmeter method of measuring power in three-phase circuits is given so concisely that we doubt whether any reader who comes across it for the first time will be able to follow the reasoning. We think also that it is a pity Kelvin's law for the maximum efficiency of power transmission lines is merely stated; a proof could have been given in two or three lines.

The author has adopted the recommendation of the International Electrical Commission, and calls the unit tube of induction the Maxwell. He, however, calls the unit of magnetic flux density —*i.e.* a Maxwell per square centimetre—the Gauss. The recommendation of the I.E.C. is that the unit of magnetic force be called the Gauss. Magnetic force is not mentioned at all, and up to a certain point the author seems to get on very well without it. His definition, however, of permeability as the ratio of the magnetic flux at a point in the medium to the magnetic flux at the same point if an infinitesimal portion of the medium at the point were removed and air substituted is open to criticism.

Teachers find it difficult to give a satisfactory definition of the capacity—or, as the Americans call it, the capacitance—of a condenser. In this book it is defined by means of the charging current for a given sine-shaped wave of potential difference applied to its electrodes, and this gets over many difficulties. Mercury arc rectifiers, which can often advantageously replace rotary—or, as the Americans call them, synchronous—converters receive a chapter to themselves. The book concludes with a large number of photographic reproductions of the latest types of electrical machinery and apparatus. Some of these, however—*e.g.* the electrolytic lightning arrester—are not described in the text. A. R.

British Scientific and Technical Books.

A Catalogue of British Scientific and Technical Books Covering every Branch of Science and Technology, carefully Classified and Indexed. Prepared by a Committee of the British Science Guild. Pp. xviii+376. (London: British Science Guild, 6 John Street, Adelphi, W.C.2, 1921.) 10*s*. net.

IT would be difficult to discover many readers of NATURE who would not be interested in the present volume, and would not find it a useful addition to their libraries. Hitherto the information within its covers has been obtained only by the wearisome perusal of some 120 publishers' lists, with their varying methods of classification.

The volume is a result of a desire of the British Science Guild to make a complete record of scientific and technical books, other than those intended for primary schools and elementary volumes of like nature, in the current lists of publishers in the United Kingdom. No attempt at selection has been made by the Committee, and the present writer is of the opinion that this course is a wise one. There are many works which are condemned by one authority and yet are recommended by another. The whole difference lies in the point of vision and the purpose for which the work is wanted. This being so, it is far better to place before the inquirer a list of books on a given subject and let him make his choice, knowing as he probably does his own requirement. If skilled advice be needed, with such a list at hand it is probable that any expert would be willing to give advice.

The entries are arranged in subject order in a classification devised to be such that, so far as practicable, related subjects are placed near to one another, the titles under each head or subhead being arranged alphabetically according to authors' names.

If there is any doubt as to the particular group or groups in which a subject would appear, a reference to the alphabetical subject index at the end of the volume at once indicates where it will be found. This alphabetical subject index adds considerably to the value of the work, as it is a guide to the contents, rather than a mere indication of the titles, and it is evident that much care has been taken in its compilation. A very complete alphabetical list of authors, collaborators, and translators is also included.

The insertion of the date of publication of nearly every item is an extremely useful feature. This information very seldom appears in a publisher's catalogue, and one is left in ignorance as to whether a book is twenty years old, or the latest publication on the subject.

Apart from the purpose for which the work has been produced, it constitutes a valuable post-war survey of the British resources in this field of literature. With its aid some lacunæ may be disclosed which, it is hoped, British authors and publishers will be quick to fill.

The trustworthiness of the volume has been very thoroughly tested, and although some hundreds of items have been checked, the reviewer found no serious reason for criticism. A few prices are not correct, but this is only to be

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expected considering the fluctuations in price which have occurred during the last few months. The titles of one or two important works do not appear, but inquiry elicits the information that they are out of print, and thus do not come within the scope of the book. What at first appears to be an omission of the valuable Reports on the Progress of Applied Chemistry, published by the Society of Chemical Industry, is evidently due to the decision that the books included should be obtainable through booksellers in the usual way. The reason for the inclusion of a work on "Sea-water Distillation" under the heading of General Chemistry is not quite easily explained, but it is probably due to a mechanical error in sorting. Such slight blemishes do not, however, detract from the value of the book, and considering the amount of tedious work which must have been incurred in its compilation, it is a matter for congratulation that so few occur.

Booksellers and librarians would be well advised to include a copy amongst their works of everyday reference, as they will find that it will save them a great deal of unnecessary labour.

The volume is well printed, and the binding should stand considerable wear and tear. An unusual feature is that the end papers are wholly reinforced with a fine gauze or "mull," in a manner which should tend to strengthen the binding very materially.

The British Science Guild has produced a notable volume, and it is much to be hoped that its sale will justify the expressed desire to issue an annual edition. F. W. CLIFFORD.

The Statecraft of Ancient Greece.

The Works of Aristotle. Translated into English under the editorship of W. D. Ross. Vol. 10, *Politica,* by B. Jowett; *Oeconomica,* by E. S. Forster; *Atheniensium Respublica,* by Sir Frederic G. Kenyon. (Unpaged.) (Oxford: At the Clarendon Press, 1921.) 15*s.* net.

THE new volume of the Oxford Aristotle will probably appeal to a wider range of readers than any of the others, because it deals with statecraft, theories of government, economics, and constitutions. The "Politics" is no doubt the best known of Aristotle's works outside the body of students who have had to read the treatises for university courses. This is in large part due to the splendid translation made by Jowett in 1885. It is this translation which is reprinted in the present volume, revised and brought up to date by Mr. W. D. Ross, the editor of the series. With it is included Mr. E. S. Forster's translation of "Œconomica," an Aristotelian work which is not by Aristotle, but attributed by the translator to a disciple who lived earlier than the second century B.C. The third work in the volume is the treatise on the constitution of Athens, discovered in a papyrus in 1891. The translation is that originally made by Sir Frederic G. Kenyon, but now revised by him and in part reconstructed from fragments since discovered.

When we read Aristotle we have to keep reminding ourselves that we live in a different world, for he seems to be discussing always our own modern problems. It is difficult to realise that questions so vital to us were commonplace in the ancient world, and we are often tempted to exclaim with the Hebrew preacher, "There is nothing new under the sun." It must be rather a shock to those who have heard of Thales of Miletus as the first of the great line of Ionian natural philosophers to be told that he once enriched himself by cornering the olive presses. Certainly the moral Aristotle draws is designed to show that the philosopher despises wealth, for he has the opportunity of acquiring great riches if he chooses to use his wisdom for a worldly end. The other story of the man of Sicily, presumably a banker, who used the money deposited with him to buy up the iron-ore, and made a profit for himself of more than 200 per cent., has a still more curious moral. The man was expelled from Syracuse as a dangerous person who might get too rich, but he was allowed to take his money with him! Aristotle's moral is that the State would do well to take example from him. Even "the Great Illusion" was exposed in the ancient world, and produced, in one instance at least, more effect than Mr. Norman Angell has produced in our generation. We are told that "Eubulus, when Autophradates was going to besiege Atarneus, told him to consider how long the operation would take, and then reckon up the cost which would be incurred in the time. 'For,' said he, 'I am willing for a smaller sum than that to leave Atarneus at once.' These words of Eubulus made an impression on Autophradates, and he desisted from the siege."

H. W. C.

Our Bookshelf.

The Outline of Science: A Plain Story Simply Told. Edited by Prof. J. Arthur Thomson. Pp. ii + 40. (London: G. Newnes, Ltd., n.d.) 1*s.* 2*d.* net.

FROM its title this work (which is to be completed in about twenty parts) claims no more than to give an *outline* of science. Astronomy occupies

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